

EWA Asound bites≡

- X EWA will make use of many of the CALFED water management tools. Especially in its first few years of operation, a substantial portion of the water needed for an EWA will be acquired through voluntary purchases on the water transfer market.
- X Water for the EWA must be available at the beginning of Stage 1. Funding must be assured through time and adequate to secure needed water through Stage 1. CALFED estimates that approximately \$50M/year will be needed initially for water purchases.
- X The balance between financial and water assets can shift with time. Funds for water purchases are essential to the EWA, with higher annual funding needed in the early years of implementation before additional facilities provide new assets independent of purchases. As certain facilities come on-line, the purchases can be replaced with water in storage or water moved to key locations.
- X A key element of the EWA is access to both groundwater and surface storage upstream, downstream and in the Delta. The performance of the EWA increases as the EWA=s access to surface and ground water storage increases.
- X Flexibility in project operations and improvements in conveyance facilities can both help deliver environmental water at the desired place and time and help create new EWA assets. EWA additional water gained by flexing a delta standard (such as E/I Ratio) when fish are not likely affected, could provide additional protection at more sensitive times. EWA will be implemented and evaluated in Stage 1, and , based on its performance, CALFED will consider whether and to what extent the EWA can subsequently be applied to a broader range of regulatory programs protecting Delta resources.
- X Shared system operational flexibility between the water users and EWA is essential to provide water for the account and reliability for the water users. CALFED will need to determine how operational flexibility will be shared between the EWA and the water users.
- X Effective operational decisions depend on accurate, timely information. CMARP and the EWA must function together to help anticipate the impacts of projects operations so these impacts can be reduced or avoided. Sufficient knowledge to allow proper assessment of conditions and needs will require more through monitoring of aquatic resources in the future.
- X In order to plan EWA=s operations over the long-term, CALFED will need to craft the outline of how the EWA will build, apply and renew its assets. What share of facility improvements will EWA gain? How will the EWA manager account for the assets?
- X Effective management of the EWA will be critical to it=s success. How will the assets be

managed? How will biological needs be determined? How will the public participate? How will the EWA's fishery activities be linked to other CALFED activities?

- X CALFED must evaluate the extent to which funds and expenditures for upstream ERP water acquisitions can be integrated into the EWA water acquisitions. Similarly, CALFED must develop mechanisms for coordinating water purchases under ERP and EWA with other ongoing environmental water acquisition programs such as CVPIA Anadromous Fish Protection Program.

Potential Attributes of An EWA

For a given quantity of environmental water dedicated to environmental protection, an appropriately sized EWA with the appropriate combination of assets could be more protective than traditional standards. Potential attributes of the EWA include:

- 1. Increased Flexibility** - The flexibility to provide the greatest level of environmental protection at a time when fish are most threatened may be difficult to craft as a fixed standard. EWA operations could be a more flexible and efficient tool for providing protections for certain species.
- 2. Increased Protection for Species From Entrainment Even During Favorable Hydrological Conditions** - As an example, delta smelt adults following a dry year are believed to be particularly vulnerable. Entrainment of such fish in January or February could be a problem, despite apparently beneficial hydrologic conditions.
- 3. Focused Protection** - It is difficult to predict which species will be at greatest risk at a given time in the future. An EWA could provide the ability to tailor operations to protect those species most at risk in a given time and situation.
- 4. More Efficient Use of Water** - Because of the wide range of hydrologic and environmental conditions that can be encountered in the Delta, it is difficult to craft a standard that efficiently protects species under all circumstances. The EWA could allow operations to be tailored to the specific circumstances at hand.
- 5. Greater Opportunities to Experiment and Learn From Previous Operations** - Opportunities to conduct experimental manipulations may be enhanced because an account could be used to address potential impacts to other beneficial uses. An EWA will also allow rapid translation of new scientific insights into improved operations. The information provided by CMARP will be critical to successful adaptive management.
- 6. More Incentives for Efficiency** - The incentive for getting maximum benefit from a given resource comes from having finite resources. An EWA would encourage efficient use of its assets.

7. Better Coordination of Maximum Benefits - An EWA could provide opportunity to coordinate with actions of others (ERP habitat restoration, CVPIA, etc). EWA decisions can take into account diverse events taking place at the same time, such as hatchery releases, large natural production of juveniles, unexpected toxicity events, etc.

8. Potential for Reduced Conflict Between the Environment and Water Users - The EWA managers and water users would have a common interest in improving system infrastructure, system flexibility, biological monitoring and scientific analysis in order to obtain water benefits for both. With a properly sized EWA, there would be an adequate amount of water to provide the necessary species protection and reliable water supplies, thereby minimizing conflict.

1. Determine which environmental protections would be provided through prescriptive standards and which would be provided through an EWA.
2. Investigate various approaches for implementing an EWA.
3. Determine how much (1) existing surface and groundwater storage; (2) water purchase contract water; and (3) water generated from co-funding efficiency or reclamation projects will be needed by an EWA as of the first day of EWA operations.
4. Determine how the EWA assets will shift and grow during Stage 1.
5. Determine sharing methods of initial water export improvements (e.g., South Delta improvements).
6. Determine sharing methods of additional Stage 1 water export improvements.
7. Determine EWA rights to use existing and future storage and conveyance facilities.
8. Develop accounting methodologies.
9. Assure that water quality impacts of operational changes to protect fish are adequately dealt with within the CALFED water quality program.
10. Secure adequate, assured funding to support EWA operations at defined levels.
11. Allocate costs of this program.
12. Define institutional control of EWA, including governance, public participation, linkages to CMARP, and decision making process.
13. Determine existing and reliability of existing legal mechanisms to assure intended use of EWA water released for instream purposes.